TO: Members: Governor's Task Force on Information Technology In Health Care

FROM: Governor.Ehealth

SUBJECT: Weekly Communiqué

DATE: September 6, 2005

COMMUNICATON BULLETIN

FEDERAL ACTIVITIES

Washington, DC August 19, 2005 - The formation of the Office of the National Coordinator for Health Information Technology (ONC) has been published in the Federal Register (http://a257.g.akamaitech.net/7/257/2422/01jan20051800/edocket.access.gpo.gov/2005/pdf/05-16446.pdf <http://a257.g.akamaitech.net/7/257/2422/01jan20051800/edocket.access.gpo.gov/2005/pdf/05-16446.pdf>).

The notice in the Federal Register describes a formal structure for ONC, which will consist of five components:

1. The Immediate Office of the National Coordinator
2. The Office of Health Information Technology Adoption
3. The Office of Interoperability and Standards
4. The Office of Programs and Coordination
5. The Office of Policy and Research

ELECTRONIC HEALTH RECORDS

washingtonpost.com
Revamped Veterans' Health Care Now a Model By Gilbert M. Gaul
Washington Post Staff Writer
Monday, August 22, 2005; A01

For years, the Department of Veterans Affairs' sprawling health care system was criticized by veterans groups and government investigators as a dangerous backwater of medicine. Report after report portrayed it as suffocating from top-heavy bureaucracy,

dirty and unsafe hospitals, and little or no accountability. Thousands of eligible patients opted to get their care elsewhere.
But in the past decade, largely unnoticed by the public, the system has undergone a dramatic transformation and now is considered by some to be a model.

Researchers laud the VA for its use of electronic medical records, its focus on preventive care and its outstanding results. The system outperforms Medicare and most private health plans on many quality measures, including diabetes care, managing high blood pressure and caring for heart attack patients. Demand at veterans' clinics and hospitals is soaring -- so much so that Congress last month appropriated $1.5 billion in emergency funds to cover a budget shortfall that the department did not anticipate.

Some experts point to the VA makeover as a lesson in how the nation's troubled health care system might be able to heal itself. "If you take a five- or six-year perspective, I think what the Veterans Health Administration has done is stunning," said Donald M. Berwick, president and chief executive of the Institute for
Healthcare Improvement. "It's especially impressive because this is a massive system that works in a fishbowl, is under tremendous scrutiny and has constrained resources."

Since 1995, the VA says, the number of patients it is treating has doubled, to about 5.2 million. At the same time, the department reports that it has trimmed its staff by about 12,000 people, opened hundreds of outpatient clinics and shifted its focus to primary care, while cutting costs per patient by about half. "If we've proved anything . . . in the last 10 years, it is that quality is less expensive," said Jonathan B. Perlin, the acting undersecretary for health.

The VA's new medicine is on display at the bedside. One recent morning in Room 148 on the third floor of the Baltimore VA Medical Center, nurse Diane Bailey prepared to give Francis Xavier Lee, 79, a World War II veteran, medication for asthma. In most hospitals, Bailey would rifle through charts attempting to decipher a physician's scrawled instructions. At Lee's bedside, she logged on to a laptop computer containing the patient's medical history and a list of medication he was scheduled to receive. Bailey scanned Lee's bar-code bracelet to ensure his identity, then typed in the time and dose of each medication. If she were to hit the wrong key or enter the wrong information, the computer program would signal her to correct the mistake. Initially, Bailey said, she was concerned about using the computer, but now she is a huge fan. "It's all right here," she said, pointing to the patient's electronic medical record. "Everything I need. It makes my job a lot easier."

The VA's metamorphosis began in the early 1990s, when it was under attack and worried about its future. Officials turned to Kenneth W. Kizer. A physician and former Naval Reserve officer, Kizer had earned kudos for helping restructure health services for the state of California. "Everyone said, 'You're a fool,' " he recalled. " 'There isn't an agency in the government as sclerotic as the VA. Why go in and waste your time?' "
But Kizer was looking for a new challenge. Over the next five years, he and aides reorganized the VA's unwieldy network of 172-plus hospitals and 132 nursing homes into

22 self-contained systems responsible for providing all patient care. The VA also shifted some specialists to its new outpatient clinics. At the same time, the department invested heavily in computers and software. They link distant clinics to urban teaching facilities and allow VA physicians to access patient records wherever they happen to be.

These days, computers are used to measure everything at VA sites with an aim toward improving care. Dorothy A. Snow, acting chief of staff in Baltimore, pores over pages of weekly statistics on how her facility compares with others in the area as well as its own performance over time. Areas requiring attention are highlighted in yellow. Most are blue or red, signaling that Baltimore has met or exceeded its targets. In 1990, before Baltimore began tracking its performance, rates of screening for breast and cervical cancer were 50 percent and 17 percent, respectively. In 2003, they were 88 percent and 87 percent. "The computers are an effective way of driving performance," Snow said.

By contrast, private physicians in Medicare's sprawling fee-for-service system receive little feedback from the huge federal insurance program and lag behind VA doctors on numerous quality indicators, according to half a dozen recent studies by VA and academic researchers. Medicare officials point out that the VA has the advantage of being an integrated delivery system -- that is, a health plan in which most of the doctors are salaried employees and all care is coordinated and tracked. In Medicare, physicians work for themselves and patients are free to pick and choose their services. Still, Perlin pointed out, "we were an integrated delivery system before, and no one said we had an advantage." Veterans' organizations applaud the VA makeover, saying surveys show that most of their members are satisfied with the medical care they get. At the same time, they worry that tight budgets are forcing some veterans to wait months for an appointment.

"The quality of care has improved greatly, and we are grateful for that," said Peter S. Gaytan, director of veterans affairs for the American Legion. "But the timeliness of care is suffering. We have vets waiting in line because the funding is inadequate to meet the need." Unlike Medicare, the VA is expected to work within a budget. Recently, Congress criticized the department's leaders for underestimating the demand for services in light of the fighting in Afghanistan and Iraq. At June hearings, VA officials said the model they used to develop the 2005 budget relied on three-year-old data.

In June, the Bush administration told Congress that the VA would need more money this year, and revised its request for fiscal 2006, boosting the department's health budget by $2 billion . Still, much of the increased demand for services predates Afghanistan and Iraq, and appears to coincide with the department's new reputation for quality. A large part of that shift is the result of the investment in computers. The 75,000 physicians who are full-time, salaried doctors or affiliated with the Veterans Health Administration have access to a detailed electronic record of every patient. It includes every visit, prescription, surgery and test a patient receives. Doctors can call up prior visits, enter blood pressures and blood sugar levels, access the latest research, and tap into treatment guidelines -- all with the click of a mouse. If a patients moves -- say, from Baltimore to San Francisco -- her record follows. If a physician in the VA's Pocomoke City, Md., outpatient clinic

wants to check how his patient is faring after surgery in Baltimore, he can read the notes online. In the past, only one doctor could access a chart at a time. Now anyone can, at any time. "If I want to check one of my patients from home, I can do it before I go to bed," Snow said. "It's made my job so much more fun. I'm more effective."

Perlin estimated that it costs the VA about $78 per patient per year to operate the electronic health record. "Roughly the equivalent of not repeating one blood test," he said. Later this year, the VA plans to allow patients to access their electronic medical records over the Internet through its My HealtheVet. "The patient is often the forgotten partner in health care," Perlin said. Sharing the records "recognizes a person has interests in how his care is managed."

RECENT REPORTS

The eHealth Initiative recently published a study entitled, "Second Annual Survey of State, Regional and Community-Based Health Information Exchange Initiatives and Organizations." As this was a national survey, you might find the report very informative. It can be accessed at their web site: www.ehealthinitiative.org

MEETING NEWS

As many of you know, Governor Warner has been asked to present at the upcoming national HIT conference. Following are the initiatives provided to the Governor's office by Task Force members.

Compilation of Talking Points for Governor's Speech

Part 1: Specific Actions in Virginia

Report from Department of Health: Virginia has a childhood vaccine tracking and decision support system that contains all immunizations given in public health clinics. We have initiated a statewide immunization registry, which will be tested in 5 pilot sites before being rolled out statewide. This system will allow all providers, both private and public, to share immunization records so more children can be immunized on time and unnecessary immunizations can be avoided. – Health Department

Being able to respond quickly to a bioterrorism event quickly will save lives. The Commonwealth is actively collecting data from almost 30 emergency rooms, mostly in Northern Virginia and Tidewater, and analyzing the data daily for suspicious patterns of disease. Data is shared with DC and Maryland so any pattern in the National Capitol Region can be detected. This project, ESSENSE II, is a joint project with Johns Hopkins Advanced Physics Lab and the Defense Advanced Research Projects Agency. As additional data is added to this system, such as drug store sales and school attendance, the system should become more sensitive to unusual events. – Health Department

In Virginia, six separate state agencies play significant roles in long-term support for older adults and adults with physical disabilities. In addition, at the local level, 25 Area Agencies on Aging, 34 health departments, 120 county or city social services departments, 40 local community mental health boards and 16 Centers for Independent Living also provide services to this population. Therefore, in order to deliver services in an efficient manner and to avoid costly duplication of efforts, Virginia is building a Community-based Coordinated Services System. At the core of this system is the Uniform Assessment Instrument. The afore mentioned organizations agreed upon an assessment instrument that contains all relevant patient information necessary for proper program placement. This instrument will become a web-based application this fall and therefore, in effect, will become an electronic health record for senior services. Virginia currently has a system known as SeniorNavigator, which is a comprehensive database of senior services. It is available to patients and their families as a means to understand the community resources available to them. The Uniform Assessment Instrument will become incorporated with the SeniorNavigator system to achieve a Community-based Coordinated Services System. This system will qualify program eligibility, ensure service receipt, track outcomes and identify service gaps. It will eliminate the necessity for the patient to access different service providers and have multiple eligibility determinations. This effort is governed by the Statewide Advisory Council for the Integration of Community-based Services that are chaired by the Secretary of Health and Human Resources. Pilot sites will become operational this fall.

The Virginia Department of Health (VDH) recently partnered with Carilion Health System, a large multi-hospital system in southwest Virginia, to share health information electronically. As both entities, Carilion Health System and VDH serve a common patient population; there is a high incidence of when health information from one entity would be critical in patients' treatment decisions for the other entity. The goal of the public/private partnership is to promote continuity of care, minimize the duplication of testing and to make access to patient information more efficient for those with a need to know. Currently, VDH practitioners have access to CarePort, the Carilion hospital EHR system, to access information on shared patients. The information that can be accessed includes the hospital discharge summery, lab reports, imaging, telemetry, surgery reports and emergency room reports. CarePort access is granted only after a patient is informed of the Carilion system and has signed a specific consent. Only previously identified "shared" patient's information can be viewed. This initial pilot is demonstrating both the cost improvement and service delivery improvements that EHR implementation is designed to produce. VDH is currently involved with the creation of a statewide Public Health EHR. This will then allow VDH to share relevant patient treatment information back with Carilion, as well as other service providers across the Commonwealth.

Report from Owens- Minor provides healthcare facilities with new approaches to managing their high-dollar clinical assets, business information from disparate computer systems, and complex supply chain logistics inside and outside of the hospital walls. Following are several examples of technology-based services that are enabling hospitals, in Virginia and across the nation, to realize significant operating efficiencies and

sustainable cost-savings as well as to refocus their energies on their core competencies in providing patient care:

- **A clinical asset tracking system**, based on barcode technology, enables hospitals to track and manage implant tissue to help them comply with strict new and revised government and JCAHO regulations. This easy-to-use tool increases the speed, accuracy and organization of data collection; alerts OR staff to implant expirations; and quickly identifies online the patients who received specific implants to support the hospital's patient safety initiatives.

- **A decision support tool and analytical service** enables healthcare systems to consolidate medical supply purchasing history across disparate computer networks, creating clear visibility of purchasing patterns and product movement system wide. With this information, the healthcare customer can make informed decisions about product standardization, contract compliance and other key supply chain initiatives.

- **A comprehensive program in healthcare supply management** helps hospitals streamline the supply chain to their clinical suite through timely business information, product management and process improvement – whether for the main operating room, labor & delivery or outpatient surgery. In its most comprehensive form – in place at leading Virginia healthcare organizations – this program delivers critical medical supplies in a single package for a hospital's surgical procedures. This relieves clinicians of time-consuming, supply management tasks, enabling them to spend more time with patients, and to focus on delivering great care.

Report from Cumberland Plateau Health District: When at stake is 15.5% of GDP, more than one seventh of the entire economic output of the United States, appealing to a vision larger than efficiency or cost savings is requisite in harnessing the "better angles of our nature" to create a zone of cooperation within our larger zone of competition.

Care spark is a Regional Health Information Organization (RHIO); it was initiated when a broad-based coalition of healthcare providers, insurers, employers and community leaders determined the mission of regional health improvement imposed an overarching need for an efficient system to communicate and share health information and data among providers to enable coordination of care, clinical process and public health improvement.

CareSpark was developed through a two-year strategic planning process of needs assessment, research, consensus-building and planning that involved over eighty individuals from more than thirty organizations to assess feasibility, plan for technical and clinical implementation, financial sustainability and assure the effort was in accordance with state and federal regulations concerning privacy, security, and anti-trust. Serving 705,000 residents in 17 counties of the "Tri-Cities" TN / VA region of Central Appalachia, CareSpark is now poised to implement its sustainable business plan to enable in its local health care market of 1,200 physicians and 18 hospitals.

Report from Carilion: Dispersed across 1400 square miles and delivering care from 100 locations, Carilion uses state of art technology and a caring touch for the communities served.

Hospital Medication Safety Carilion was one of the first delivery systems in the United States to fully implement a comprehensive, wireless Medication Administration System. This system provides a "real-time electronic safety net" for hospitalized patients. Every patient, caregiver and medication is identified with an electronic bar code while the process of administrating medications and documenting the outcomes is completed automated. An automated drug dispensing system, using finger print identification technology controlling access to medications connected via a wireless communications network means that each step in the medication process is supported and verified for accuracy. The results of this system have been to dramatically improve patient safety. On average, over two million annual doses are issued with this network and this highly sophisticated system prevents more than 500 serious mistakes each month while providing a rich resource of data about the medication process.

Emergency Department Electronic Medical Record All of Carilion's hospital emergency departments are linked via a single Electronic Medical Record. Consequently, physicians have access to every emergency room visit in any Carilion hospital. As a result, the status of each patient in every location is constantly known and monitored as to movement within the care process, including the status all tests, treatments and results. In addition, this electronic medical record has created an environment of completely paperless and radiological film less operation. Physicians are able to view orders, x-rays and complete charts in any treatment room. These emergency department records are also electronically sent to our physician office electronic records and our Physician Portal. The portal combines all Carilion hospital, physician office and Emergency Room charts into a single physician view. Therefore, physicians have information helping them manage care and ambulance traffic across the region as well as identifying patients who attempt to defraud emergency rooms seeking unwarranted prescriptions.

Physician Offices Electronic Medical Record Carilion's Physician Office Electronic Medical Record is one of the most advanced anywhere. Over 650,000 patients have their complete records online linking some 2500 physicians and caregivers. 1.2 million patient appointments are stored in the computer and a patient's record is accessible in any of Carilion's care locations. This online paperless system provides our healthcare providers with access to all records and results. With its state of the art tools, the computers can review numerous data elements and provide decision support for providers in real time, at the point of care. Each day more than 5000 patient prescriptions are electronically transferred to 100 regional pharmacies. Meanwhile, physicians can roam between their offices, the hospital, and their homes viewing medical records on their cellular telephones. Pioneering innovation has been the hallmark of these ambulatory efforts including the real-time acquisition of patient's vital signs automatically into the electronic chart. Finally, Carilion is leading the way in community based medicine as we analyze over 250 million electronic forms for research and care improvement activities.

Report from VHHA:

Medication Safety: HCA Richmond Hospitals have a robot filling prescriptions for their pharmacies four times faster than a human and virtually never makes a mistake. “Regis Fill Bin,” as the robot’s been dubbed by hospital staff, is a welcome relief to pharmacists, allowing them more time monitoring drug interactions, reviewing patients’ therapy and working on other intervention efforts. “Regis Fill Bin” significantly has reduced medication errors in the hospitals’ and has a 99.97 percent accuracy rate.

ICU Safety: Sentara Norfolk General Hospital in Norfolk, Virginia, was the first hospital in the nation to use eICU technology, which allows doctors and critical care nurses to make “virtual” rounds of patients in the ICU. They can monitor patient conditions, check vital signs and test results and communicate with staff, patients or family members from a remote location. This technology does not replace the bedside visit; rather it complements it, resulting in shorter hospital stays and better patient outcomes. The technology is now available in six Sentara Healthcare hospitals in the region and since its inception in 2000, nearly 300 lives have been saved using this technology. HCA Richmond Hospitals, headquartered in Richmond, Virginia, and Inova Health System in Northern Virginia near Washington, D.C., both have implemented this technology in their hospitals as well. With the extra pairs of eyes working 24/7, Inova’s bedside team was able to react quickly when the eICU team noticed a patient in another room was trying to remove a vital (central?) line that could have worsened his condition.

Integration of information from differing sites: MedVirginia in Richmond has just this month launched a community health information exchange that provides the infrastructure to integrate into a single electronic chart information from hospitals, labs, pharmacies and physician offices. Physicians can electronically prescribe medications with the system, with the system alerts mentioned before. They can also securely communicate with each other within this system, enabling all members of the care team to have access to the right information at the right time in the treatment process.

Report from MedVirginia is a limited liability company based in Richmond, Va. organized in 2000 by CenVaNet, a physician-hospital organization representing over 900 physicians and 10 hospitals, and Virginia Urology, a technology savvy physician practice with a long and successful history of clinical automation.

MedVirginia is taking a great stride forward in realizing its vision with the launch of MedVirginia Solution, a community health information exchange (HIE) that integrates inpatient, outpatient, pharmacy, lab and physician data from independent provider entities into a single, patient-centric, electronic chart. The health information exchange will be launched in the fall of 2005.

MedVirginia is working closely with its partner, CenVaNet, in developing new strategies for managing chronic disease…in part through the use of health information technology.

CenVaNet is one of 14 sites nationally participating in the landmark study, Medicare Coordinated Care Demonstration (MCCD). In this Demonstration, over 1,400 high-risk seniors with chronic disease are being studied to determine the impact of disease management on quality, patient satisfaction and cost. An example of how all the pieces fit together is medication management for seniors with chronic disease. Twenty (20) percent of seniors have 5 or more chronic conditions. These 20 percent average over 40 prescriptions per year, written by a number of different physicians. The opportunity for drug-drug and drug-allergy interactions is significant, since there currently is no centralized medication database for a physician to reference when prescribing a new medication.

Bon Secours Richmond Health System is a major sponsor and data supplier for MedVirginia.

MedVirginia has served as the key administrative and technical partner in the Rural Virginia E-health Collaborative (RVEC), an Agency for Health Research and Quality (AHRQ) funded program of Rappahannock General Hospital. The goal is to improve safety, quality and efficiency through the use of e-prescribing, e-results and e-referrals. Their local data exchange will be integrated with the MedVirginia HIE to support continuity-of-care in referrals to tertiary centers. Michael Matthews, CEO of MedVirginia, serves as Principal Investigator for RVEC.
Report from Northrop Grumman, a Virginia-based company, was the leader in providing troops with EHR support that has resulted in 2 years worth of data for 6 million lives, serving patients from Hawaii to Europe with 40,000 patient encounters a day.

Part II: The culture of information technology, comments from VHHA:

We are blessed with the best trained medical professionals and most technologically sophisticated health care system in the world.

- However, changing demographics of the U.S. population have changed the major public health challenges of this generation.

- A particular area of concern is the management of chronic disease. According to the CDC, "chronic diseases—such as cardiovascular disease (primarily heart disease and stroke), cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems."

- Chronic disease – such as heart disease and stroke, cancer and diabetes – represents a special challenge to our health care system, which was built to address *acute* health problems. They are among the most prevalent, costly and preventable of all health problems.

- According to the Institute of Medicine report, Crossing the Quality Chasm, "IT has enormous potential to improve the quality of health care."

- The IOM identifies six areas of beneficial impact of health information technology adoption:
    - Safety
    - Effectiveness
    - More patient-centered
    - Timeliness
    - Efficiency
    - Equity

- Yet, health care providers, especially physicians, have traditionally under-invested in information technology.

- Physicians have been reluctant investors due to lack of capital, lack of proven ROI, concerns regarding changing vendor marketplace, and lack of interoperability with other clinical data systems.

- A key concern is the inability for the physician to be able to access critical clinical information, organized in a single location, with decision support tools that enable the physician to be more effective and efficient in caring for patients.

- Medications are a prime example of the need for adoption of more advanced data systems. 20% of our seniors have 5 or more chronic conditions. These seniors average over 40 prescriptions per year. Without technology support, the opportunities for drug-drug and drug-allergy interactions are enormous. Yet, the technical tools now exist to consolidate at a community level, the list of medications a patient is on…regardless of who prescribed that medication or where the patient got the prescription filled. Further, that consolidated medication database can be integrated with electronic prescribing, providing point-of-care alerts when a physician tries to prescribe a medication that may not be appropriate.

- Taking advantage of systems such as these, however, requires a level of collaboration and cooperation among the various stakeholders in health care, including physicians, hospitals, labs, pharmacies, health plans, plus local, state, and federal governments.

- Leadership across all sectors of our society, both public and private, must embrace this challenge and this opportunity.

- Implementation of electronic health records in the daily health care setting is still in the infancy stage. Most health providers that have begun making inroads are still in the early testing stages – ensuring that the use of this technology will work across all settings.

- There will continue to be barriers to getting the job done, and the public and private sectors must work together to knock down those barriers. And state and federal governments can lead by example. We must eliminate regulatory barriers. We must leverage our role as employer and health care provider to provide incentives for health information technology adoption. We must ensure that our public health departments are active participants in community-wide clinical data initiatives. And we must be a strong and vocal advocate for the benefits of information technology among our public, who are justifiably concerned about the issues of data security and privacy.